

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Cancel)

2. (Cancel)

3. (Cancel)

4. (Cancel)

5. (Currently Amended) A playback apparatus for executing playback of a video stream recorded on a recording medium based on an entry map also recorded on the recording medium, the entry map indicating a plurality of entry points in the video stream in one-to-one correspondence with a plurality of entry times and flags,

the recording medium further has a plurality of management information files and playback section information recorded thereon, and

the playback section information defines a start point and an endpoint of a multi-angle section in the video stream, and includes a field storing names of the management information files,

said playback apparatus comprising:

a reading unit operable to read pictures contained in the video stream from at the recording medium;

a playback unit operable to play back the read pictures; and

a control unit operable, in response to a request to start playback from a given temporal point, to (i) specify a nearby entry time to the requested temporal point from among entry times each with a flag set to ON and (ii) cause the reading unit to read the video stream starting from an entry point corresponding to the specified entry time;

a status register operable to store a value indicating an angle image to be played back;
and

an update unit operable to update the value stored in the status register in accordance with a user operation, wherein

the playback unit includes:

a picture buffer operable to store a plurality of reference pictures; and

a decoder operable to perform motion compensation using the reference pictures,

the reading unit is operable to read a management information file indicated by the updated value of the status register, from among the management information files whose names are stored in the playback section information, and

the entry map used by the control unit is contained in the read management information file.

6. (Cancel)

7. (Cancel)

8. (Currently Amended) The playback apparatus according to Claim 5Claim 7, wherein the recording medium has recorded thereon a plurality of AV files, the video stream read by the reading unit is contained in an AV file having a same name with the read management information file, and

the reading unit is operable to read the video stream starting from one of a plurality of extents of the AV file, said one extent containing an entry point corresponds to the specified entry time.

9. (Currently Amended) A program stored on a non-transitory computer-readable medium for causing a computer to execute playback of a video stream recorded on a recording medium,

the recording medium having ~~recorded thereon~~ an entry map, a plurality of management information files, and playback section information recorded thereon, the entry map that indicates indicating a plurality of entry points in the video stream, in one-to-one correspondence with a plurality of entry times and flags,

the playback section information defining a start point and an end point of a multi-angle section in the video stream, and including a field storing names of the management information files,

said program comprising code operable to cause the computer to perform:

a step of reading pictures contained in the video stream from a recording medium;

a step of playing back the read pictures; and

a step of controlling so as to cause, in response to a request to start playback from a given

temporal point, (i) an entry time that is near the requested temporal point to be specified from among entry times each with a flag set to ON and (ii) the reading of the video stream in said~~the~~ reading step to be started from an entry point corresponding to the specified entry time; and

updating a value stored in the status register in accordance with a user operation, wherein the status register stores a value indicating an angle image to be played back,
in said playback, a picture buffer of the computer and a decoder of the computer are controlled, the picture buffer storing a plurality of reference pictures, and the decoder performing motion compensation using the reference pictures.

in said reading, one of management information files whose names are stored in the playback section information is read from the recording medium, the management information file to be read being indicated by the updated value of the status register, and
the entry map used by said controlling is contained in the read management information file.

10. (Currently Amended) A playback method for executing on a computer playback of a video stream recorded on a recording medium,

the recording medium having recorded thereon an entry map, a plurality of management information files, and playback section information recorded thereon, the entry map indicating that indicates a plurality of entry points in the video stream, in one-to-one correspondence with a plurality of entry times and flags,

the playback section information defining a start point and an end point of a multi-angle section in the video stream, and including a field storing names of the management information files,

said playback method comprising:

a step of reading pictures contained in the video stream from a recording medium;

a step of playing back the read pictures; and

a step of controlling so as to cause, in response to a request to start playback from a given temporal point, (i) an entry time that is near the requested temporal point to be specified from among entry times each with a flag set to ON and (ii) the reading of the video stream in said the reading step to be started from an entry point corresponding to the specified entry time; and

updating a value stored in the status register of the computer in accordance with a user operation, wherein

the status register stores a value indicating an angle image to be played back,

in said playback, a picture buffer of the computer and a decoder of the computer are controlled, the picture buffer storing a plurality of reference pictures, and the decoder performing motion compensation using the reference pictures,

in said reading, one of management information files whose names are stored in the playback section information is read from the recording medium, the management information file to be read indicated by the updated value of the status register, and

the entry map used by said controlling is contained in the read management information file.

11. (New) A playback system having a recording medium and a playback apparatus, the recording medium comprising a video stream, an entry map, a plurality of management information files, and playback section information recorded thereon,

the video stream on the recording medium being composed of a plurality of segments which constitute a multi-angle section,

the entry map indicating a plurality of entry points in the video stream in one-to-one correspondence with a plurality of entry times and flags,

the playback section information defining a start point and an end point of a multi-angle section in the video stream, and includes a field storing names of the management information files, and

the playback apparatus comprising:

a reading unit operable to read pictures contained in the video stream from the recording medium;

a playback unit operable to play back the read pictures; and

a control unit operable, in response to a request to start playback from a given temporal point, to (i) specify a nearby entry time to the requested temporal point from among entry times each with a flag set to ON and (ii) cause the reading unit to read the video stream starting from an entry point corresponding to the specified entry time;

a status register operable to store a value indicating an angle image to be played back; and

an update unit operable to update the value stored in the status register in accordance with a user operation, wherein

the playback unit includes:

a picture buffer operable to store a plurality of reference pictures; and

a decoder operable to perform motion compensation using the reference pictures,

the reading unit is operable to read a management information file indicated by the

updated value of the status register, from among the management information files whose names are stored in the playback section information, and

the entry map used by the control unit is contained in the read management information file.

12. (New) The playback system according to claim 11, wherein
 - the recording medium has a plurality of AV files recorded thereon,
 - the video stream read by the reading unit is contained in an AV file having a same name with the read management information file, and
 - the reading unit is operable to read the video stream starting from one of a plurality of extents of the AV file, said one extent containing an entry point corresponds to the specified entry time.